

Amendments to the Claims:

The following listing of claims will replace all previous versions and listings of claims:

Claims:

1. (Currently Amended) An electrical machine, comprising:

a housing assembly having first and second ends;

a first bearing mounted in said housing, said first bearing having a plurality of rolling elements disposed between first inner and outer races ;

a second bearing mounted in said housing and spaced away from said first bearing, said second bearing having a plurality of rolling elements disposed between second inner and outer races;

a rotor assembly including a shaft having first and second ends mounted in said first and second bearings, respectively, such that said shaft has a predetermined amount of axial and radial play relative to said housing;

a biasing element disposed between one of said shaft or said housing and one of said bearings, said biasing element for initially urging said ~~rotor assembly~~ shaft to a preloaded position relative to said housing, wherein said first inner race and said second inner race are locked into respective fixed positions to said shaft and said first outer race and said second outer race are locked into respective fixed positions to said housing to prevent axial and radial movement of each of said first inner race and said second inner race relative to said shaft and said first outer race and said second outer race relative to said housing, such that said shaft is locked in said preloaded position to

prevent reciprocating axial and radial ~~loading~~ movement during machine operation;

wherein the coefficients of thermal expansion of said housing assembly, said rolling elements, races, bearings, and said shaft are selected so that said rolling elements, races, bearings, and said shaft are maintained in said locked preloaded position due to the selected coefficients of thermal expansion during varying thermal conditions during machine operation.

2. (Canceled)

3. (Original) The electrical machine of claim 1 wherein said biasing element comprises a spring disposed between said rotor assembly and said first or second inner race.

4. (Original) The electrical machine of claim 1 wherein said biasing element comprises a spring disposed between said housing and said first or second outer race.

5. (Original) The electrical machine of claim 1 wherein said housing assembly comprises:

a generally cylindrical housing including an axially extending portion with a front end plate connected to a front end thereof; and
an end bell attached to a rear end of said housing.

6. (Canceled)

7. (Previously Presented) The electrical machine of claim 1 wherein said bearings are constructed from high carbon chromium steel and said housing assembly and said rotor assembly are constructed from 400 series stainless steel.

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Currently Amended) An electric motor, comprising:

a generally cylindrical housing assembly having first and second ends,
said housing defining first and second spaced-apart bearing pockets;

a first bearing having a plurality of rolling elements disposed between first
inner and outer races, said first outer race being received in said first bearing pocket;

a second bearing having a plurality of rolling elements disposed between
second inner and outer races, said second outer race being received in said second
bearing pocket;

a rotor assembly including a shaft received in said first and second inner
races, such that said rotor has a predetermined amount of axial and radial play relative
to said housing;

a biasing element disposed between one of said shaft or said housing and
one of said bearings which initially urges said shaft to a preloaded position relative to
said housing, wherein said first inner race and said second inner race are locked into
respective fixed positions to said shaft, and said first outer race and said second outer
race are locked into respective fixed positions to said housing to prevent axial and
radial movement of each of said first inner race and said second inner race relative to

the shaft and said first outer race and said second outer race relative to the housing, such that said rolling elements, races, bearings and said shaft are locked in said preloaded position to prevent reciprocating axial and radial ~~loading~~ movement during machine operation; and

wherein the coefficients of thermal expansion of said housing assembly, said rolling elements, races, bearings, and said shaft are selected so that said rolling elements, races, bearings, and said shaft are maintained in said preloaded position due to the selected coefficients of thermal expansion during varying thermal conditions.

14. (Original) The electric motor of claim 13 wherein said first and second outer races are secured to said housing, and said first and second inner races are secured to said shaft.

15. (Original) The electric motor of claim 13 wherein said biasing element comprises a spring disposed between said shaft and said first or second inner race.

16. (Original) The electric motor of claim 13 wherein said biasing element comprises a spring disposed between said housing and said first or second outer race.

17. (Original) The electric motor of claim 13 wherein said housing assembly comprises:

a generally cylindrical housing including an axially extending portion with a front end plate connected to a front end thereof; and
an end bell attached to a rear end of said housing.

18. (Canceled)

19. (Previously Presented) The electric motor of claim 13 wherein said bearings are constructed from high carbon chromium steel and said housing assembly and said rotor assembly are constructed from 400 series stainless steel.

20. (Previously Presented) The electric motor of claim 13 wherein the coefficients of thermal expansion of said housing assembly, said balls, races, bearings, and said shaft are selected so that said rotor assembly will be retained in said preloaded position over a temperature range of about -40° C to about 105° C.